# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/680,559 | 10/05/2000 | Emily L. Hipp | A-69722/DCA/JWC | 2072 |

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| EXAMINER |
|---|
| CHANKONG, DOHM |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2152 | |

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
| **Office Action Summary** | 09/680,559 | HIPP ET AL. |
| | Examiner | Art Unit | |
| | Dohm Chankong | 2152 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>25 February 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-24* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/25/05 (2)*.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____ .

## DETAILED ACTION

1>     Applicant's amendment has been received. The amendment has not been entered for reasons detailed below. Claims 1-24 are presented for further examination.

### *Allowable Subject Matter*

2>     Examiner apologizes for prematurely indicating the allowability of claims 15 and 24 in the final office action. The indicated allowability of claims 15 and 24 are withdrawn upon a more comprehensive review of the prior art. Rejections based on newly cited rationale follow.

### *Response to Arguments*

3>     Upon further view of the prior art, PROSECUTION IS HEREBY REOPENED. A new ground of rejection of claims 1-24 is set forth below.

4>     Yu, U.S Patent No. 5.734.865, was previously used by Examiner to reject claim 3, in Non-final office action, dated 2.2.2004. In the response to this office action, Applicant argued that Yu did not disclose assigning both a virtual IP address and a virtual host name.

However, upon closer inspection, Yu discloses a object structure that stores variables of the application. These variables include both a virtual host name as well as a virtual IP address [Figure 5 | Figure 7 | column 13 «lines 48-65»].

Therefore, Yu discloses that the structure [which represents the variables assigned to the application] contains both a virtual name and virtual address.

### *Claim Rejections - 35 USC § 102*

5>      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6>      Claims 3, 5, 11-15 and 20-24 are rejected under 35 U.S.C. 102(b) as being clearly

anticipated by Yu, U.S Patent No. 5,734,865.

7>      Yu was cited by applicant in IDS #2, filed 2.13.2001.

8>      As to claim 3, Yu teaches a method comprising:

assigning a unique virtual IP address and virtual hostname that are unique to a first

application while the first application is running [Figure 5 «items "IF_NAME" and "virtual

host IP address"» | column 13 «lines 48-65» where : Yu's structure includes both the virtual

host name and the virtual IP address];

said first application requesting to connect to a port and address of the second

computer to which the second application is connected [column 4 «lines 14-19» | column 5

«lines 55-60»]; and

resolving the virtual IP address of the first application as a local address to connect

the first application to said second application [column 15 «lines 12-24» | column 18 «lines 7-

15»].

9>      As to claim 5, as it is merely a medium that executes the steps of the method of claim

3, it does not teach or further define over the claimed limitations. Therefore, claim 5 is

rejected for the same reasons as set forth for claim 3, supra.

10>     As to claim 11, Yu discloses the method of claim 3, wherein the virtual hostname is

dynamically assigned [Figure 7c «item "*if_name"» | column 3 «lines 36-45» | column 17

«lines 8-41» where : Yu discloses dynamically configuring the application structures, one of

the variables in the struct including the virtual name].

11>     As to claim 12, Yu discloses the method of claim 3, wherein the virtual hostname is

preassigned [Figure 7c «item "*if_name"» | column 3 «lines 36-45» | column 17 «lines 8-41»

where : Yu discloses statically configuring the application structures, one of the variables in

the struct including the virtual name].

12>     As to claim 13, Yu discloses the method of claim 3, wherein the virtual IP address is

dynamically assigned [column 3 «lines 36-45» | column 17 «lines 8-41» | column 18 «lines 7-

25» where : Yu discloses statically configuring the application structures, one of the variables

in the struct including the virtual address].

13>    As to claim 14, Yu discloses the method of claim 3, wherein the virtual IP address is

preassigned [column 3 «lines 36-45» | column 17 «lines 8-41» | column 18 «lines 7-25» where :

Yu discloses statically configuring the application structures, one of the variables in the

struct including the virtual addresses].

14>    As to claim 15, Yu discloses the method of claim 3, further comprising registering the

virtual hostname and virtual IP address with a snapshot framework [column 17 «lines 42-58»

where : Examiner is broadly interpreting a "snapshot framework" as an object that accepts

registration of application variables, such as a virtual hostname or virtual IP address. Yu

discloses registering data structures that include application variables such as "*if_name"

(host name – Figure 7c) as well as addresses with a network interface list. Therefore, in this

embodiment of Yu, his network interface list is analogous to Applicant's snapshot

framework as the list performs the same limitations claimed in the claim].

15>    As to claims 16-19, as they are claims to a medium that merely execute the steps of the

method of claims 7-10, respectively, they do not teach or further define over the claimed

limitations. Therefore, claims 16-19 are rejected for the same reasons as set forth for claims 7-

10, supra.

16>    As to claims 20-24, as they are claims to a medium that merely execute the steps of the

method of claims 11-15, respectively, they do not teach or further define over the claimed

limitations. Therefore, claims 20-24 are rejected for the same reasons as set forth for claims

11-15, supra.

### *Claim Rejections - 35 USC § 103*

17>     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18>     Claims 1, 2, 4, 6-10 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Barrera, III, (hereinafter Barrera), U.S Patent No. 6,247,057 in view of Jindal et al

(hereinafter Jindal), U.S Patent No. 6,324,580.

19>     Barrera was cited by Examiner in Office Action on 12.17.2003.

20>     As to claim 1, Barrera teaches a method comprising:

assigning a unique virtual IP address and virtual hostname to a first application

residing on a first computer (column 3, lines 21-28  and column 10 «lines 10-12» where :

Barrera's virtual service is comparable to a first application, and his host computer is

analogous to the first computer. And the handle is comparable to a virtual hostname as it is

assigned to locate the virtual service);

said first application requesting to connect to a port (column 4, lines 58-59 and column

6, lines 13-22);

using the virtual IP address as a local address to connect the first application to said

port (column 6, line 64 to column 7, line 14 and column 9, lines 13-19 where : Barrera discloses

a virtual service that uses the IP address as a local address to connect to the port located on

the host computer);

resolving a request to connect to said first application from a second application

running on a second computer in communication with said first computer [Figure 7 | column

5 «lines 4-18» where : Barrera's client represents a second application]; and

connecting said second application to said first application using said local address

(column 4, lines 40-42 and column 8, lines 53-63).

Barrera does disclose a handle (hostname) that allows the client to directly connect to

the endpoints (local address) (column 9, lines 52-67 and column 10, lines 10-12 – where

Barrera's handle allows the client to directly connect to the local address of the endpoint;

therefore, the handle can be compared to a virtual hostname) but does not explicitly disclose

resolving said hostname to said local address.


21>      The act of resolving Barrera's hostname to the virtual service's local address is

inherent; a client that utilizes the assigned hostname would need to connect to the virtual

service located at its local address on the host computer. Furthermore, Jindal teaches

resolving said hostname to said local address (column 5, lines 26-37 and 47-56 – where Jindal's

virtual server name is analogous to a "virtual hostname"). It would have been obvious to one

of ordinary skill in the art at the time the invention was made to implement Jindal's method

in Barrera, so a virtual name can be assigned to Barrera's virtual services and associated with the service's virtual IP address. One would have been motivated to perform such an implementation because it is easier for the user to remember a name (such as "www.sun.com") as opposed to a cumbersome and long IP address.

22>    As to claim 2, Barrera does disclose a virtual hostname (handle) and virtual IP addresses [column 9 «lines 27-34»] and that the client can utilize the virtual hostname to connect directly to the virtual IP address [column 10 «lines 10-12»] but does not specifically disclose resolving said virtual hostname to said local address.

23>    Jindal discloses resolving said virtual hostname to said local address comprising the steps of said second application supplying said virtual hostname [virtual server name] to a module [DNS] that maintains associations between virtual hostnames and virtual addresses [column 5 «lines 26-37»]. It would have been obvious to one of ordinary skill in the art to have incorporate Jindal's hostname translation functionality into Barrera's system to allow clients utilizing the handle to locate the corresponding endpoint. Utilizing the associations between virtual hostnames and virtual addresses would allow clients in Barrera's system to utilize the handle to locate and connect to the corresponding endpoint

24>    Claim 4 is a computer readable medium with executable program instructions that performs the steps of the method of claim 1. Therefore claim 4 is rejected for the reasons set forth in above paragraphs 6 and 7 for claim 1.

25> Claim 6 is a computer readable medium with executable program instructions that performs the steps of the method of claim 2. Therefore claim 6 is rejected for the reasons set forth in above paragraph 8 for claim 2.

26> As to claim 7, Barrera teaches a method wherein the virtual hostname is dynamically assigned (column 8, lines 27-33 and column 10, lines 10-12).

27> As to claim 8, Barrera teaches a method wherein the virtual hostname is preassigned (column 8, lines 27-33 and column 10, lines 10-12).

28> As to claim 9, Barrera teaches a method wherein the virtual IP address is dynamically assigned (column 8, lines 27-33).

29> As to claim 10, Barrera teaches a method wherein the virtual IP address is preassigned (column 8, lines 27-33).

30> As to claims 16-19, as they are claims to a medium that merely execute the steps of the method of claims 7-10, respectively, they do not teach or further define over the claimed limitations. Therefore, claims 16-19 are rejected for the same reasons as set forth for claims 7-10, supra.
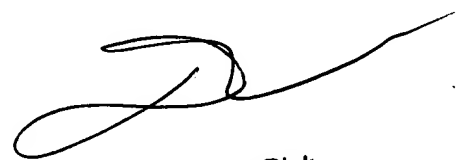
*Conclusion*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dohm Chankong whose telephone number is (571)272-3942.

The examiner can normally be reached on 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

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access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free).

DC

Dung C. Dinh
Primary Examiner